

## **Introduction**

Good Afternoon Chairman LoBiondo, Congressman Filner, and distinguished members of the Subcommittee. It is my pleasure to appear before you today to discuss Coast Guard efforts supporting national requirements for icebreaking. A robust icebreaking capability is critical to our ability to ensure safety, security and prudent stewardship within our Nation's maritime domain including our national interests in the polar regions.

## **Background**

Significant historical events have been the catalyst that influenced national polar icebreaker policy decisions. These events have included: the purchase of Alaska; World War II; the Cold War; the 1956 International Geophysical Year; the Antarctic Treaty; and the oil crises of the 1970s. Additionally, recent focus on issues such as the 1982 Law of the Sea Convention, increasing world demand for natural resources, changing shipping patterns driven by a global economy, recent severe ice conditions in the Antarctic, and changes in Arctic sea ice have fueled new interest in our national polar icebreaker employment and resource needs.

These recent and developing polar issues, coupled with U.S. interests in both polar regions, mandate an awareness of our national polar missions. In particular, the United States must consider the increasing international initiatives in the Arctic. Thus far, the Arctic has witnessed a growing Chinese polar presence, more frequent and assertive Russian seabed claims, and increasing Canadian claims in the Arctic.

Against this backdrop, the National Research Council's recent report on U.S. polar icebreaker needs addresses the variety of issues we confront when discussing national concerns in the polar regions. As I will cover, the national requirements for polar ice breaking capability must be considered in three areas: the Coast Guard's historic and traditional role in fulfilling direct mission tasking, the Coast Guard's propensity and requirement to support contingency operations, and the future expansion of our sovereign national presence.

## **Direct Mission Tasking**

Since 1947, when Admiral Byrd led a major naval task force to the Antarctic, Coast Guard polar icebreakers have supported interagency missions of the National Science Foundation, the Department of Defense, the Department of Commerce's National Oceanographic and Atmospheric Administration, and the Department of State. These traditional direct mission tasks include such diverse activities as re-supplying remote polar stations, conducting scientific research at both poles, ensuring that legitimate maritime traffic has access to and mobility within the polar regions, and leveraging a reciprocity agreement that ensures access to Canadian polar icebreaking resources.

## **Contingency Operations**

The Coast Guard combines the capability of our polar icebreakers to support polar research and national security missions with traditional Coast Guard missions, as the polar icebreakers are often the closest Coast Guard ships available to respond to crisis in the remote areas where they operate. With increased traffic seeking natural resources and offering broader access to the regions, there has been an increased need for the capabilities to conduct the enforcement of laws and treaties, marine environmental protection and response, search and rescue and other services, provided by a national vessel of opportunity. For example in 1998, the Military Sealift Command chartered cargo ship GREEN WAVE suffered a major engine explosion having just cleared the ice off Antarctica following its re-supply of United States facilities at McMurdo Sound. Adrift alone for two days, the GREEN WAVE was assisted by the cutter POLAR STAR, which successfully towed the crippled vessel on a two-week, fifteen-hundred mile, trip from Antarctica to the nearest commercial assistance in New Zealand. Similarly, in July of 2004 the cutter HEALY responded to a report of four overdue walrus hunters lost in a remote area of northern Alaska and found the hunters, all between the ages of fifteen and twenty, onboard a disabled skiff that had been adrift in the ice for over three days. Later in the same patrol, HEALY again conducted search and rescue operations to locate and rescue an eighty-one year old mariner in distress. Additionally, in March of 2005 the cutter POLAR STAR, returning from a six-month deployment in Antarctica, responded to the devastation Cyclone Olaf wrought in the Pacific by assisting the Federal Emergency Management Agency (FEMA) and delivering over 70,000 pounds of relief supplies to the devastated American Samoa, Islands of Tau and Ofu. All of these capabilities support the existing 1990 Presidential Determination, which stated that "given the vast distances involved and the significant cost

of operating icebreakers, they are most efficiently utilized by combining operational and research missions in any given deployment whenever possible.”

### **Sovereign Presence**

Congress has granted the Coast Guard wide-ranging statutory authorities consistent with its multifaceted missions so we can provide a sovereign, as well as scientific, presence in the Polar Regions. These authorities reside in a variety of statutory and regulatory titles and reflect the spectrum of the Coast Guard enforcement activities as well as our historical evolution as both an armed force and a Federal maritime law enforcement agency. Taken together, these diverse authorities create a unique maritime capability for the nation; even to our farthest reaches. The ability of the United States to exert influence and support its national polar interests depend on a national presence and continuing engagement, even if this is manifested by seemingly unrelated routine activities. Specifically, the Arctic Ocean lacks an agreement similar to the Antarctic Treaty, which guarantees political and environmental stability in the southern regions. While the U.S. Antarctic program requires polar icebreakers to support land-based stations, our national Arctic policy requires a maritime presence to guarantee our security interests, enforce United States law, and influence the international foreign policy process. A recent U.S. Geological Survey report concluded that one-fourth of the world’s energy reserves lie north of the Arctic Circle. And as the 1982 Convention on the Law of the Sea and related international claims to the Arctic Ocean basin evolve, United States interests will require an active and increasing presence in the Arctic.

### **Fleet Condition**

Since the polar icebreaker fleet was reduced from eight vessels during the 1960’s to three vessels today, operational time on our polar icebreakers has been at a premium and almost exclusively devoted to the direct mission tasking from other agencies. The Coast Guard polar icebreaker fleet currently consists of the cutters HEALY, POLAR SEA, and POLAR STAR. Our newest, the HEALY, was commissioned in 1999 and has been actively supporting annual Arctic research deployments since. The other two, the cutters POLAR SEA and POLAR STAR were both built and commissioned in the 1970’s and are nearly thirty years in age. Recently the POLAR STAR was placed in a caretaker status pier-side in Seattle.

Due to the harsh and remote polar environment and operating methods and conditions for polar icebreakers, all of these vessels require durable marine engineering features in order to allow them to withstand years of colliding with sea ice (typically having the characteristics of concrete, found twenty feet thick or more, and at temperatures as low as negative 60°F). The unique environment in which polar icebreakers operate, coupled with their significant operating requirements, make the vessels inherently costly to operate and maintain.

## **Conclusion**

In recent years, material degradation to two of our aging heavy icebreakers has caused doubt regarding the deployment of the ships to the Arctic and Antarctic.

The results of the National Research Council study on polar icebreakers will help the Administration and Congress continue to define policy for the polar icebreaker program.

Thank you for the opportunity to testify before you today. I will be happy to answer any questions you may have.